HP ProCurve 1810G-24 Switch HP ProCurve 1810G-8 Switch

Models

HP ProCurve 1810G-24 Switch	J9450A
HP ProCurve 1810G-8 Switch	J9449A

Key features

- Web-managed Layer 2 Gigabit 8-/24-port switches
- Fanless switches for silent operation
- Two dual-personality mini-GBIC slots (1810G-24)
- IEEE 802.3af PoE device option (1810G-8)
- Automatic low power mode

Introduction

The HP ProCurve 1810G Switch Series provides reliable, plug-and-play Gigabit network connectivity. As the follow-on to the popular HP ProCurve Switch 1800 Series, the 1810G series provides additional network security capabilities, enhancements to ease of use, improved energy efficiency, and expanded deployment flexibility. The series consists of 8- and 24-port 10/100/1000 Web-managed switches. The HP ProCurve 1810G-24 Switch offers two dual-personality ports for optional fiber uplinks, while the HP ProCurve 1810G-8 Switch can optionally be powered by an upstream Power over Ethernet (PoE) switch. Both switches offer silent operation and multiple mounting options for flexible installation. The 1810G series offers network security protection against denial-of-service attacks, includes the Kensington lock for theft protection, and offers legendary HP quality backed by the ProCurve Lifetime Warranty at an affordable price.

Features and Benefits

Industry-leading warranty

- ProCurve Lifetime* Warranty

Connectivity

- **Dual-personality ports** (1810G-24 switch): two 10/100/1000 ports or mini-GBIC slots for optional fiber connectivity such as Gigabit-SX, -LX, or -LH, or 100-FX
- **NEW IEEE 802.3af PoE-powered device option** (1810G-8 switch): can obtain power from a standard PoE device on Port 1, making the switch ideal for deployments where a power outlet is not available; such flexibility helps you to extend the network to wherever an Ethernet cable can reach
- **Jumbo packet support**: supports up to 9,216-byte frame size to improve performance of large data transfers

Resiliency and high availability

- **IEEE 802.3ad Link Aggregation Control Protocol**: provides link-level redundancy with support for up to four trunks on the ProCurve 1810G-8 Switch and eight trunks on the ProCurve 1810G-24 Switch, each with up to four links (ports) per trunk
- **NEW Loop protection**: Loop Detection and Protection feature prevents network loops and promotes high network availability

Manageability

Overview

- Intuitive Web interface: enables simple management via an easy-to-use Web browser interface for switch configuration, monitoring, and administration
- IEEE 802.1AB Link Layer Discovery Protocol (LLDP): automated device discovery protocol for easy mapping by network management applications
- NEW Dual flash images: provides independent primary and secondary operating system files for backup while upgrading
- Integration with HP ProCurve Manager: enables discovery and mapping via ProCurve Manager, available as a free download from the Web and provided in box with selected manageable ProCurve devices; provides all the basic tools needed to handle a network effectively, along with a 30-day trial version of HP ProCurve Manager 3.0
- NEW Energy Savings Mode: automatically places the physical ports in low power mode and LED power down mode to conserve energy

Layer 2 switching

- VLAN support and tagging: support up to 64 port-based VLANs and dynamic configuration of IEEE 802.1Q VLAN tagging, providing security between workgroups

Security

- NEW Secure Sockets Layer (SSL): encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch
- NEW Automatic denial-of-service protection: monitors six types of malicious attacks and protects the network by blocking the attacks
- Management password: provides security so that only authorized access to the Web browser interface is allowed

Quality of Service (QoS)

- Traffic prioritization (IEEE 802.1p): allows real-time traffic classification into eight priority levels mapped to eight queues

Monitor and diagnostics

- Port mirroring: enables traffic on a port to be simultaneously sent to a network analyzer for monitoring

Ease of use

- NEW Locator LED: allows users to set the locator LED on a specific switch to either turn on, blink, or turn off; simplifies troubleshooting by making it easy to locate a particular switch within a rack of similar switches
- Comprehensive LED display with per-port indicators: provides an at-a-glance view of status, activity, speed, and full-duplex operation
- ProCurve/IEEE Auto-MDIX: automatically adjusts for straight-through or crossover cables on all 10/100/1000 ports

Flexibility

- Designed with no fan: enables quiet operation for deployment in open spaces
- NEW Flexible mounting options: mounting options include wall, ceiling, tabletop, or undertable configuration for flexible installation process
- NEW IEEE 802.3af PoE-powered device option (1810G-8 switch): can obtain power from a standard PoE device on Port 1, making the switch ideal for deployments where a power outlet is not available; such flexibility helps you to extend the network to wherever an Ethernet cable can reach
- 1U Rack-mountable size (1810G-24 switch): offers a rack-mounting option
- NEW Kensington lock: provides theft protection

Warranty and support

Overview

- **ProCurve Lifetime Warranty**: for as long as you own the product, with next-business-day advance replacement (available in most countries)
- **Electronic and telephone support**: limited electronic and telephone support is available from HP; refer to the HP website at: www.procurve.com/support for details on the support provided and the period during which support is available
- **Software releases**: refer to the HP website at: www.procurve.com/support for details on the software releases provided and the period during which software releases are available

* For as long as you own the product, with next-business-day advance replacement (available in most countries). The following hardware products have a five-year hardware warranty for the disk drive and lifetime hardware warranty (for as long as you own the product) for the rest of the module: HP ProCurve ONE Services zl Module, HP ProCurve Threat Management Services zl Module, and HP ProCurve MSM765zl Mobility Controller. The following hardware products and their related series modules have a one-year hardware warranty with extensions available: HP ProCurve Routing Switch 9300m series, HP ProCurve Switch 8100fl series, HP ProCurve Network Access Controller 800, and HP ProCurve DCM Controller. The following hardware products have a one-year hardware warranty with extensions available: HP ProCurve M111 Client Bridge, HP ProCurve MSM3xx-R Access Points, HP ProCurve MSM7xx Mobility and Access Controllers, HP ProCurve RF Manager IDS/IPS Systems, HP ProCurve MSM Power Supplies, HP ProCurve 1-Port Power Injector, HP ProCurve CNMS Appliances, and HP ProCurve MSM317 Access Device. Standalone software, upgrades, or licenses may have a different warranty duration. For details, refer to the ProCurve Software License, Warranty, and Support booklet at: www.procurve.com/warranty.

HP ProCurve 1810G-24 Switch (J9450A)	**Ports**	22 auto-sensing 10/100/1000 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T); Media Type: Auto-MDIX; Duplex: 10Base-T/100Base-TX: half or full; 1000Base-T: full only 2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or an open mini-GBIC slot (for use with mini-GBIC transceivers)	
	Physical characteristics	**Dimensions**	6.74(d) x 17.42(w) x 1.73(h) in. (17.12 x 44.25 x 4.39 cm) (1U height)
		Weight	4.32 lb. (1.96 kg), Fully loaded
	Memory and processor	8 MB flash, 16 MB SDRAM; packet buffer size: 512 KB	
	Mounting	Mounts in an EIA-standard 19 in. telco rack (hardware included); wall, desktop, tabletop, and undertable mounting	
	Performance	**100 Mb Latency**	< 4.7 μs (64-byte packets)
		1000 Mb Latency	< 3.0 μs (64-byte packets)
		Throughput	up to 35.7 million pps (64-byte packets)
		Switching capacity	48 Gbps
		MAC address table size	8,000 entries
	Environment	**Operating temperature**	32°F to 104°F (0°C to 40°C)
		Operating relative humidity	15% to 95% @ 104°F (40°C), non-condensing
		Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
		Non-operating/ Storage relative humidity	15% to 90% @ 149°F (65°C), non-condensing
		Altitude	up to 10,000 ft. (3 km)
		Acoustic	Power: 0 dB no fan
	Electrical characteristics	**Maximum heat dissipation**	102 BTU/hr (107.61 kJ/hr)
		Voltage	100-127 / 200-240 VAC
		Current	0.7 / 0.4 A
		Maximum power rating	30 W
		Frequency	50 / 60 Hz
		Notes	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
	Safety	CSA 22.2 No. 60950; EN 60950/IEC 60950; UL 60950	
	Emissions	FCC Rules Part 15, Subpart B Class A; EN 55022; VCCI; ICES-003 (Canada)	
	Immunity	**EN**	EN 55024, CISPR 24
		ESD	IEC 61000-4-2

		Radiated	IEC 61000-4-3
		EFT/Burst	IEC 61000-4-4
		Surge	IEC 61000-4-5
		Conducted	IEC 61000-4-6
		Power frequency magnetic field	IEC 61000-4-8
		Voltage dips and interruptions	IEC 61000-4-11
		Harmonics	IEC 61000-3-2
		Flicker	IEC 61000-3-3
	Management	HP ProCurve Manager; Web browser	
	Notes	Use only supported genuine ProCurve mini-GBICs with your switch.	
	Services	3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E) 3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (U6321E) 3-year, 24x7 SW phone support, software updates (UF792E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E) 4-year, 24x7 SW phone support, software updates (UR951E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E) 5-year, 24x7 SW phone support, software updates (UR955E) Refer to the HP website at: www.procurve.com/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	
	Standards and protocols (applies to all products in series)	Denial of service protection	CPU DoS Protection
		General protocols	IEEE 802.1p Priority IEEE 802.1Q VLANs IEEE 802.3ad Link Aggregation Control Protocol (LACP) IEEE 802.3x Flow Control RFC 1534 DHCP/BOOTP Interoperation RFC 2030 Simple Network Time Protocol (SNTP) v4
		Network management	IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
HP ProCurve 1810G-8 Switch (J9449A)	Ports	8 auto-sensing 10/100/1000 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T); Media Type: Auto-	

	MDIX; Duplex: 10Base-T/100Base-TX: half or full; 1000Base-T: full only	
Physical characteristics	Dimensions	4.58(d) x 7.73(w) x 1.73(h) in. (11.63 x 19.63 x 4.39 cm) (1U height)
	Weight	1.19 lb. (0.54 kg), Fully loaded
Memory and processor	8 MB flash, 16 MB SDRAM; packet buffer size: 512 KB	
Mounting	Wall, ceiling, desktop, and undertable mounting	
Performance	100 Mb Latency	< 3.9 ìs (64-byte packets)
	1000 Mb Latency	< 2.1 ìs (64-byte packets)
	Throughput	up to 11.9 million pps (64-byte packets)
	Switching capacity	16 Gbps
	MAC address table size	8,000 entries
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C), non-condensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/ Storage relative humidity	15% to 90% @ 149°F (65°C), non-condensing
	Altitude	up to 10,000 ft. (3 km)
	Acoustic	Power: 0 dB no fan
Electrical characteristics	Maximum heat dissipation	51 BTU/hr (53.81 kJ/hr)
	Voltage	100-240 VAC
	Current	0.5 A
	Maximum power rating	15 W
	Frequency	50 / 60 Hz
	Notes	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. The exact input voltage and frequency rating are determined by the specific power adapter part number ordered. Please select the correct power adapter country option.
Safety	CSA 22.2 No. 60950; EN 60950/IEC 60950; UL 60950	
Emissions	FCC Rules Part 15, Subpart B Class A; EN 55022; VCCI; ICES-003 (Canada)	
Immunity	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5

	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	IEC 61000-3-2
	Flicker	IEC 61000-3-3
Management	HP ProCurve Manager; Web browser	
Notes	Power: external AC power adapter and IEEE 802.3af-compatible PoE-PD, class 3 on Port 1	
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UE256E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UE257E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UE258E) 3-year, 24x7 SW phone support, software updates (UE260E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UR846E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR847E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR848E) 4-year, 24x7 SW phone support, software updates (UR849E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR850E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR851E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR852E) 5-year, 24x7 SW phone support, software updates (UR853E) Refer to the HP website at: www.procurve.com/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	
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	Network management	IEEE 802.1AB Link Layer Discovery Protocol (LLDP)

Accessories

HP ProCurve 1810G Switch Series accessories	Software	
	HP ProCurve Manager 3.0	--
	HP ProCurve 1810G-24 Switch (J9450A)	
	HP ProCurve 100-FX SFP-LC Transceiver	J9054B
	HP ProCurve 100-BX-D SFP-LC Transceiver	J9099B
	HP ProCurve 100-BX-U SFP-LC Transceiver	J9100B
	HP ProCurve Gigabit-LH-LC Mini-GBIC	J4860C
	HP ProCurve Gigabit-SX-LC Mini-GBIC	J4858C
	HP ProCurve Gigabit-LX-LC Mini-GBIC	J4859C

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